

Hurunui Science Stakeholder Group

Terms of Reference (Agreed at October 2016 Zone Committee meeting)

1 Background

The Hurunui Waiau Zone Committee, with Environment Canterbury, is starting the development of a long-term water management solutions package for the zone – “Healthy rivers – productive land”. This includes review of the Hurunui Waiau Rivers Regional Plan (HWRRP) – acknowledging the difficulties with the “10% rule” in the plan. As part of the solutions package, a plan change to the Canterbury Land and Water Regional Plan (LWRP) will be notified in mid-2019 with zone-specific limits and rules for the Hurunui Waiau zone where required. The plan change will eventually replace the HWRRP.

It is important that all information from all sources, not just Environment Canterbury, is used over the next two to three years to revise the HWRRP and develop the water management solutions package (ZIP Addendum) for the whole zone. There is a substantial body of information, particularly for the Hurunui catchment, from monitoring and investigations carried out by AIC, HWP, Ngāi Tahu Property and others. There is need as well for data from actual farms across the zone to underpin the development of a widely-accepted approach to property-scale nutrient management. Robust estimates will be needed of current and good management practice (GMP) nutrient losses for different land uses and farm practices under a range of soils and climates.

The Zone Committee wants widespread buy-in on the technical information, models and assessment results, thereby improving the focus on the value judgements needed and lessening the contest over technical matters in the RMA Hearing on the plan change.

The Hurunui Waiau Zone Committee strongly supports the establishment of a Hurunui Science Stakeholder Group.

2 Purpose and function of Hurunui Science Stakeholder Group

The Science Stakeholder Group will:

1. Build involvement and confidence in the science being carried out;
2. Ensure that information is used from all sources, not just from Environment Canterbury;
3. Ensure there are “no surprises” in terms of the information held, or planned to be collected, by an organisation. This includes information collected to fulfil statutory requirements.
4. Recommend membership of the Hurunui Peer Review Group (see below);
5. Help to identify the key issues of contention that require technical input;
6. Review and validate the results from analysis and modelling;
7. Focus on informing, not making, the value judgements that will be needed;

8. Identify scientific limitations, clarify assumptions and describe uncertainties;
9. Seek consensus and if necessary describe any outstanding areas of contention.
10. Provide the Zone Committee with a collective expert-view on the answers to specific questions and topics. The questions will emerge as the process progresses. The zone committee is anticipating the Science Stakeholder Group will provide a collective view on matters such as (indicative only):
 - a. Is the Hurunui over-allocated with respect to water quality? If so, why?
 - b. Are flushing flows from off-mainstem water storage a possible solution to periphyton issues (including didymo) in Hurunui River?
 - c. What land uses and farming practices contribute most to water quality?
 - d. What farming practices, if adopted widely, would improve water quality and by how much?
 - e. How long does it take to get widespread adoption of (specified) farm practices?
 - f. How much will it cost to reduce N losses in different farming systems and how would this impact farm financial viability?
 - g. What are the contributions from different land uses and water-related tourism to the District economy and employment?

The Science Stakeholder Group will **not**, as a group:

11. Advise or advocate for particular water management policies, rules or limits;
12. Re-litigate the Zone Committee's water management outcomes.

Organisations involved in the Science Stakeholder Group are, however, expected to be involved in the zone-committee led process, involving community and all interests in water in the zone, developing the water management solutions package for the entire zone. This process will include evaluation of "what-if" options (scenarios) and is likely to take place in mid to late 2017. A timeline is provided in a later section with an indication of the role of the Science Stakeholder Group over the next two years.

3 Expectations of members of the Hurunui Science Stakeholders Group

Organisations on the Science Stakeholder Group are expected to:

13. Contribute relevant information, including results from monitoring and investigations, except where such information is confidential or privileged;
14. If required, brief the Science Stakeholder Group, zone committee or community on the results of monitoring, investigations or other studies that contribute important information on water management and related matters in the zone;
15. Respect confidential and privileged information and how this should be used, such as using farm information in a manner that precludes results being identified with a specific property unless this is with the agreement of the owner;

16. Constructively work together to ensure all relevant information is used;
17. Constructively work together to ensure the technical information and science underpinning the development of the water management solutions package for the zone is of high quality and has wide support;
18. Endeavour to attend all meetings or where this is not possible ensure they are up to speed with the work of the Group;
19. Act in a manner that is consistent with the role of technical expert or advisor, not as an advocate;
20. Accept the timetable for developing the water management solutions package for the zone and the deadlines this imposes unless there is consensus amongst all of the Science Stakeholder Group and endorsed by the Zone Committee that deadlines are unreasonable and must be revised.
21. **Not** receive a meeting fee for attending meetings.

4 Geographic scope of Hurunui Science Stakeholder Group

The Hurunui Science Stakeholder Group will deal with technical information and science relating to the entire Hurunui Waiau zone **except** the Waipara catchment.

The Waipara catchment has different issues, land uses and science stakeholders than the rest of the zone. A Waipara Working Group will be established comprising science stakeholders, Ngāi Tūāhuriri, local landowners and interests.

5 Membership of Hurunui Science Stakeholder Group

The following organisations will be invited to participate in the Hurunui Science Stakeholder Group:

- Te Rūnanga o Ngāi Tahu (TRoNT);
- Kaikōura Rūnanga;
- Ngāi Tūāhuriri;
- Amuri Irrigation Company;
- Ngai Tahu Farms;
- Hurunui Water Project;
- Cheviot Irrigators Group;
- Fish and Game;
- Forest and Bird;
- Department of Conservation;
- North Canterbury Landcare Group;
- Federated Farmers;
- Rural Advocacy Group;
- Beef and Lamb;

- Deer NZ;
- Dairy NZ;
- Fonterra;
- Foundation for Arable Research;
- Horticulture NZ;
- Balance;
- Ravensdown;
- Whitewater NZ;
- Whitewater Canoe Club;
- Jet Boating NZ;
- Canterbury Tourism;
- Hurunui District Council;
- Canterbury District Health Board;
- Environment Canterbury.

Two zone committee members will be members of the Hurunui Science Stakeholder Group. Other Zone Committee members may attend meetings of the Science Stakeholders Group.

6 Record of meetings of Science Stakeholder Group

A record will be made of the key points and actions of the meetings of the Science Stakeholder Group. These records will be public.

Zone Committee representatives and Environment Canterbury staff will provide reports on the Science Stakeholder Group to the zone committee.

7 Changes to these Terms of Reference

The Hurunui Science Stakeholder Group will review these draft Terms of Reference and recommend changes, if required, to the Zone Committee who will finalise the Terms of Reference at the zone meeting in November or December 2016.

8 Outline of timeline and roles of Science Stakeholders Group (dates are indicative)

	Task	Role of Science Stakeholders Group
October 2016	Establish Hurunui Science Stakeholder Group	Join the group. Agree/revise Terms of Reference.
November 2016 – March 2017	<p>Briefings on what we know about water quality and land mgmt in the zone, what it means and what are likely causes of poor water quality.</p> <p>Briefings will present results by catchment in the following order:</p> <ul style="list-style-type: none"> • Waiau catchment (mid Nov); • Conway/Tutaeputaputa (early Dec); • Hurunui catchment(Feb); • other areas of zone (Feb). <p>The briefings will be made to the Science Stakeholder Group then to a community meeting in the catchment.</p>	<p>Make available results of monitoring or investigations.</p> <p>Present information, if needed, at briefing(s).</p> <p>Constructively review each briefing and identify improvements for when it is presented to the community.</p> <p>Reach a collective view (as far as possible) on what the results mean and the likely causes of poor water quality for each catchment.</p> <p>Identify information gaps and areas of contention that require further technical input.</p> <p>Attend community meetings, if interested, (as advocate for organisation’s interest, not as member of Science Stakeholders Group).</p>
October 2016 – July 2017	<p>Address information gaps and develop models.</p> <p>Address specific questions or topics.</p>	<p>Help identify information gaps.</p> <p>Collect and provide information.</p> <p>Provide collective expert view on specific questions or topics.</p>
July – September 2017	<p>Assess current state and “what-if” scenarios in relation to outcomes:</p> <ul style="list-style-type: none"> • technical assessment; • community assessment. <p>Identify possible solutions.</p> <p>Address specific questions and topics as they come up in community meetings.</p>	<p>Review technical assessments of whether outcomes are achieved currently and in “what-if” scenarios.</p> <p>Provide collective expert view on specific questions or topics.</p> <p>Attend community meetings, if interested, (as advocate for organisation’s interest, not as member of Science Stakeholders Group).</p>
October-December 2017	<p>Summarise “Issues and options”.</p> <p>Develop and model initial Solutions Package.</p>	<p>Provide collective expert view on specific questions or topics.</p>

	Task	Role of Science Stakeholders Group
February 2018	<p>Assess initial Solutions Package in relation to outcomes:</p> <ul style="list-style-type: none"> • technical assessment; • community assessment. <p>Identify how to achieve more outcomes, outcomes more fully and more quickly.</p> <p>Address specific topics.</p> <p>Assess effectiveness and cost of non-statutory actions.</p>	<p>Review technical assessments of whether outcomes are achieved in the initial Solutions Package.</p> <p>Provide collective expert view on specific questions or topics.</p> <p>Attend community meetings, if interested, (as advocate for organisation's interest, not as member of Science Stakeholders Group).</p>
February – June 2018	<p>Refine and improve Solutions Package.</p> <p>Agree final Solutions Package</p>	<p>Provide collective expert view on specific questions or topics.</p>
July – August 2018	<p>Agree ZIP Addendum (recommendations on the package of non-statutory actions and regulation).</p> <p>Communicate Zone Committee's recommended Solutions Package.</p>	
September 2018 – May 2019	<p>Draft polices, rules and limits</p> <p>Consultation</p>	
June 2019	<p>Notify plan change</p>	

9 Peer Review Group

It is proposed to establish a small Peer Review Group.

Purpose and function

The Peer Review Group will provide:

- a) Independent review of conceptual models, assumptions and methodological approach;
- b) Independent review of technical reports prepared by Environment Canterbury and their contractors. Where the members of the Peer Review Group do not have the specific expertise to review particular reports it will work with the Technical Lead to identify suitable independent reviewers;
- c) External expert advice to Environment Canterbury's technical team.

The Peer Review Group's key function is ensuring the technical information and modelling is fit for purpose and of a high standard. The Peer Review Group will not synthesise information or seek consensus on the science and what it means. This will be the role of the facilitated process involving the Science Stakeholder Group.

Membership

The Science Stakeholder Group will recommend the membership of the Peer Review Group. The Science Director, Environment Canterbury, will appoint the Peer Review Group following the Zone Committee endorsing the Science Stakeholder Group's recommendation.

It is anticipated that the Peer Review Group will have three members.

Given the issues in the Hurunui Waiau Zone it is expected the Peer Review Group would have experience in collaborative multidisciplinary science processes generally, and include particular expertise on:

- i. The relationship between outcomes, relating to ecosystem health (e.g. periphyton cover) and human health for recreation (e.g. pathogens and toxins), and in-river or resource-use limits;
- ii. The relationship between nutrient losses and land use, soils, farming systems and farm practices including the impact of intensification scenarios and of all farms being at good management practice;
- iii. The interaction of the groundwater and surface water systems and what this means for transport pathways and attenuation of nutrient losses between farms and waterways.

Glossary

<p>“10%-rule”</p>	<p>The provisions in the Hurunui Waiau Rivers Regional Plan (HWRRP) that constrain any increases to nutrient losses (nitrogen and phosphorus) on a farm to 10% when the nitrogen or phosphorus limits in Hurunui River are breached. The intent of the “10% rule” was to prevent land-use change from low to high nitrogen loss farming. The unintended consequence was to restrict existing farming practices on farms with low nitrogen losses. An Environment Canterbury Advice Note of July 2015 addressed this issue by stating that normal dryland farming is not “land use change” and so not subject to the “10%-rule”.</p>
<p>Canterbury Land and Water Regional Plan (LWRP)</p>	<p>The LWRP provides the planning framework for land and water management in Canterbury including water quality and quantity limits. It includes region-wide and sub-regional (zone) rules. In Hurunui Waiau Zone the LWRP applies to the Waipara and Conway catchments but not to the area covered by the Hurunui Waiau River Regional Plan.</p>
<p>Good Management Practice (GMP)</p>	<p>The practices described in the industry-agreed Good Management Practices relating to water quality (April 2015).</p>
<p>Hurunui Peer Review Group</p>	<p>The small independent group providing expert technical advice and peer review to ensure science quality in the process reviewing the HWRRP.</p>
<p>Hurunui Science Stakeholder Group</p>	<p>Technical people from organisations involved in collecting or using the technical information that will underpin the review of HWRRP and development of ZIP Addendum. The Science Stakeholder Group will ensure all relevant information is used (not just that collected by Environment Canterbury) and provide a collective expert view.</p>
<p>Hurunui Waiau Rivers Regional Plan (HWRRP)</p>	<p>The HWRRP provides the planning framework for land and water management in Hurunui, Waiau and Jed catchments.</p>
<p>Property-scale nutrient management</p>	<p>The statutory and non-statutory actions needed to manage on-farm nutrient losses and other environmental impacts to deliver the community freshwater outcomes for the waterways in the zone.</p>
<p>ZIP Addendum</p>	<p>The Zone Committee’s recommended water management solutions package including required planning provisions and limits.</p>